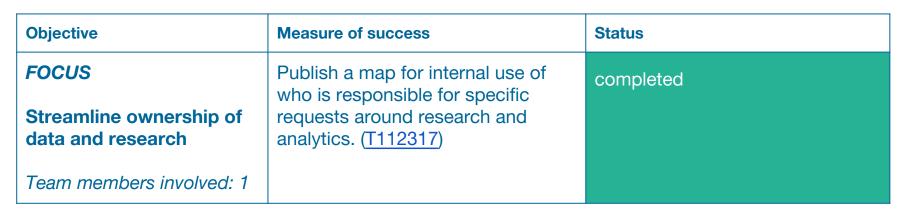
Quarterly review **Research and Data** Q2 - 2015/16

Approximate team size during this quarter: 4.5 FTE, 2 research fellows, 10 collaborators *Time spent: strengthen 40%, focus 40%, experiment 20%* 

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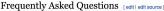


fin-aer-post



- Worked with individual teams on mentoring / backfilling / hiring of data analysts
- Published research/data ownership draft
- Socialized division of labor with Audience and Technology teams, Legal, Comms, Cteam





Research fingerpost



Q2 - Research and Data



Objective	Measure of success	Status
STRENGTHEN	Bring revscoring to fruition to our users as a Beta Feature (score	missed
Revscoring integration	integration into RC feed) (T112856)	Reason
Team members involved: 1 Collaborators: 9		<ul> <li>blocked on code review for months</li> <li>volunteer time went away during FR</li> </ul>

- we weren't able to complete the design and deployment of this beta feature, due to limited resourcing and dependency on volunteers
- revscores integration into edit histories / RecentChanges feed pushed to Q3
- focus shifted on other priorities (massive deployments, impact analysis) see **other accomplishments** below

https://meta.wikimedia.org/wiki/Research:Revision\_scoring\_as\_a\_service

#### 4

# Q2 - Research and Data

## **Revision scoring as a service**

- Achieved up to 90-99% reduction in curation workload [blog.wikimedia.de]
- **16 wikis currently supported**, incl. Wikidata, up from 6 in Q1 [meta.wikimedia.org]
- About **100 requests/minute** served [graphite.wikimedia.org]
- ORES announced via WMF blog
   [blog.wikimedia.org]
- Very large media attention [meta.wikimedia.org]
- Positive community adoption
- Study of disparate impacts of scores on anons

# WIRED	Wikipedia Deploys Al	to Expand Its Ran	ks of Human Editors		UBSCRIBE 🔎
BUSINESS CULT	URE DESIGN	GEAR	SCIENCE	SECURITY	TRANSPORT
CADE METZ BUSI	NESS 12.01.15 7:00	AM			
WIKIPEI	)IA DEPLOY	T IA ZY	'O EXPA	ND ITS	1
RANKS	DIA DEPLOY IF HUMAN E	DITO	20 IIII II 20		,
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	180	E SAGE	101		
	-15	- MA			
	S PE	W	SX		
	ES D	55	159		
	A 44	5	A		
	A C X	E	7 5/		
		32	2.92		
& EVAN MILLS/W	IRED				







- APIs available on Labs
- architecture and service implementation blessed by Ops
- First 3rd party tools adopting the service (example)





#### **Recommender systems integration**

- Article recs integrated into Content Translation (December 2015)
- **16% of all saved translations** come from article recs
- Tested in small language set, API is now available for **all language pairs in Wikipedia**
- Integration of Link recommendations still in progress

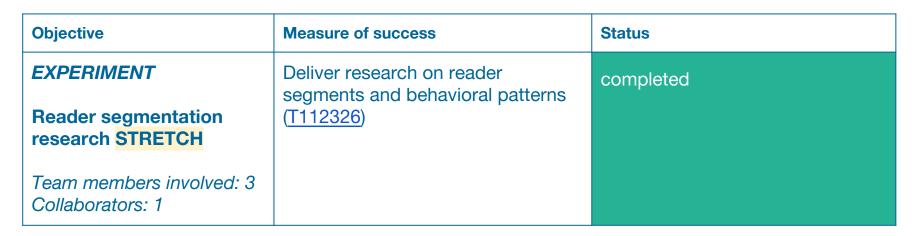
Suggestions	In progress	Published		English	<b>~</b> > p	усский	~
+ Start a n	ew translation						
	Dirty Deeds song by AC/DC	>	t Che	eap (song)		*	×
	Blue Monda	. ,				*	×
MAKING	Making a M American true English > pyccr	crime docume	entary	series		*	×

Q2 - Research and Data



- Finished historical analysis of productive edits by anons vs registered users (presented at January 2016 Research Showcase)
- Partnership with external Hadoop as a service provider (Altiscale) ended in Q3 due to limited funding (currently exploring potential *pro bono* extension of services)

Q2 - Research and Data



- completed 3 contextual surveys and identified robust categorization scheme for reader motivation and information needs
- presented results to Reading team in preparation for Part 2 (Q3)

https://meta.wikimedia.org/wiki/Research:Characterizing\_Wikipedia\_Reader\_Behaviour

# Q2 - Research and Data



### Software engineering

Drafted template for **replicable productization** of research-oriented services [wikitech.wikimedia.org]

Hired **Nathaniel Schaaf** as our first dedicated fullstack engineer.

	Stage 0 (Architectural discussion)					
Horizontal scalability	allow additional load be taken up by simply adding new instances					
Caching	Decide on caching and cache invalidation strategy					
SPOF spotting / planning	Draw out general architecture, find SPOFs and think of ways to mitigate them					
	Stage 1 (Implementation)					
Actually build the code!	This is actual development, start building stuff!					
Staging environment	provide an environment with the same set up as the $\ensuremath{\textbf{P}}$ roduction environment, for test purposes					
Deployment system	allow to deploy new changes confident that you can roll them back if they fail					
Puppetized setup	allow spinning up new instances quickly					
Comprehensive logging	identify bugs and errors more easily					
	Stage 2					
Metrics monitoring	define metrics that should go to graphite.wmflabs.org (examples of such metrics are number of revisions processed per minute, per wiki, % cached, etc.)					
Scale hardening	Things to do to reduce amount of pages - for example, control the acceptance of new web requests when the celery queue is full. (This step is not required for all services).					
	Stage 3					
API documentation	More comprehensive document endpoints (API) and usage					



Other successes and misses -

### **Outreach**

3 research papers and 1 poster accepted at major conferences in the field CHI '16, CSCW '16, WSDM '16, WWW '16

**3 research workshop proposals** submitted and accepted CSCW '16, ICWSM '16, WWW '16







Category	Workflow	Comments	Туре
	NDAs / endorsements	1 new MOU collaboration, 1 proposal reviewed for Legal	М
	Urgent DA requests	Supported Big English fundraising campaign in collaboration with Discovery	R
	Showcases and talks	2 research showcases, 1 brown bag, talks at WikiConference USA, University of Chicago, University of Missouri, Macalaster College, UMN	М

# Q2 - Research and Data



- Research & Data team page
  - Describing goals, processes and projects.
- Goals for Q3 FY16
  - What we are planning to do in the coming quarter
- FY16 priorities
  - Top priorities for the fiscal year
- Phabricator workboard
  - What we are currently doing